DETAILED ACTION

The Office Action is in response to the Applicant's reply filed July 1, 2009 to the Office action mailed on January 7, 2009.

Applicant's arguments over the 35 U.S.C. 103 (a) rejection of claims 1, 3-7, 9-10, 12, 14-16, and 18-20 over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented) in view of Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer, 1999) and Wada et al. (US Pat No. 6,534,044– previously presented) is not persuasive. Therefore, the rejection of record is herewith maintained.

Applicant's arguments over the 35 U.S.C. 103 (a) rejection of claims 2 and 17 over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented), Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer, 1999) and Wada et al. (US Pat No. 6,534,044– previously presented), as applied to claims 1, 3-7, 9-10, 12, 14-15, 16, and 18-20 as above and further in view of Fukuchi (English translation, JP 01211518 A) is not persuasive. Therefore, the rejection of record is herewith maintained.

Applicant's arguments over the 35 U.S.C. 103 (a) rejection of claims 11 and 13 over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented), Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer,

1999) and Wada et al. (US Pat No. 6,534,044– previously presented) as applied to claims 1, 3-7, 9-10, 12, 14-15, 16, and 18-20 as above, and further in view of Hayashi et al. (English translation, JP 2000327948A) is not persuasive. Therefore, the rejection of record is herewith maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 9-10, 12, 14-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being obvious over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented) in view of Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer, 1999) and Wada et al. (US Pat No. 6,534,044– previously presented).

Ichinohe et al. teaches in Example 11, a dimethylpolysiloxane in 24 weight % at 6 mm2/sec at 25 C (non-volatile oil agents of instant claims 1a and 5), a trimethylsiloxysilicate in 1 weight % (oil soluble silicone), 1,3-butylene glycol in 2.0 weight of the composition % (a volatile solvent and a lower alcohol of instant claims 1d and 9; a polyhydric alcohol) or in 0.1 to 98 % by weight of the total cosmetic material, a polyether modified silicon (recited in claim 3), and purified water (recited in claim 4).

Pigments are also taught as components in the composition (recited in claim 1e in part). Further, Ichinohe et al. teaches examples of organic powders used in the composition include polymethylsilsesquioxane (water-repellent powders, of instant claims 1b and 6). The amount of the said component in the cosmetic composition ranges from 0.1- 99- weight % to total cosmetic material (page 4, left column, lines 1-15 from top and lines 52-63 from top). Additionally, examples of inorganic powders such as titanium oxide, zinc oxide, and cerium oxide are taught as components of the cosmetic composition. The inorganic and organic powders are formed into complexes or treated with general oils, silicone oils, etc. (page 4, left column lines1-10 from bottom of page)). Ichinohe et al. teaches that any powder can be mixed into the composition regardless of shape, size, and structure as long as they have hitherto been used in conventional cosmetic materials. The amount of the said components in the cosmetic composition ranges from 0.1- 99 weight % to total cosmetic material (page 3, right column, last 3 paragraphs in entirety and page 4, left column, last paragraph in entirety) (water-repellent surface treated pigment, of instant claims 1e (in part) and 10).

Although, the reference does teach the use of polymethylsilsesquioxane as a component and fluorine-modified silicones, for example fluorine-contained unctuous agent which can also be mixed include perfluoropolyether, perfluoro-decaline, perfluorooctaine and the like in the cosmetic composition, and the use of pigments in the cosmetic compositions; the reference fails to selectively use polymethylsilsesquioxane, a perfluoroalky group-containing polyalkylsiloxysilicate, and surface treated pigments as components of the composition of example 11.

Yonekura et al. teaches the use of polymethylsilsesquioxane powders in 3-5 parts as a component of makeup or cosmetic compositions. Additionally the reference teaches the polymethylsilsesquioxane powders and other cosmetic powdery raw material in cosmetic binder oils. Cosmetic powder raw material include pigments such as zinc, silica, and titanium. Yonekura et al. teaches that the composition may include water, surface active agents, perfume, thickeners, and antiseptics. Yonekura et al. teaches that the polymethylsilsesquixane powders have "excellent effects of natural color and smoothness upon application" to the skin (column 1 lines 60-65), provide "a moisturized feeling," and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10).

Oka et al teaches hydrophobic agents such as fluorine-modified trimethylsiloxysilicate treated powders in 0.1 to 20 or preferably in 0.1 to 7 of a hydrophobic powder and aqueous ingredient. Additionally, Hougham teaches that fluorination of polymers provides for a wide range of properties for example, low permeability to nonpolar liquids , improved permaselectivity, excellent wettability and adhesion, low friction coefficient and chemical inertness.

Wada et al. teaches a cosmetic material comprising silica coated metal oxide particle further surface treated with a hydrophobizing agent. The metal oxide particles include titanium oxide, zinc oxide, cerium oxide, zirconium oxide, and iron oxide. The surface coated metal oxide particles have a primary particle size of 5-120 nm. The metal oxide particles coated with silica (column 3 lines 39-47) are further coated with a hydrophobizing agent (column 49, claim 1). The amount of the silica-coated metal oxide

particles and surface-hydrophobicized silica-coated metal oxide particles in a cosmetic material of the invention is preferably in the range of 1-50 wt % and more preferably 5-30 wt % with respect to the cosmetic material.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the silicon resin polymethylsilsesquixane, fluorine fluorine-modified trimethylsiloxysilicate treated powders, and surface-hydrophobicized silica-coated metal oxide particle into the cosmetic composition because Ichinohe et al. teaches the use of polymethylsilsesquioxane, fluorine-modified silicones for example fluorine-contained unctuous agent which can also be mixed include perfluoropolyether, perfluoro-decaline, perfluorooctaine and the like in the cosmetic, and metal oxides in the cosmetic; Yonekura et al. teaches the use of polymethylsilsesquioxane in a cosmetic; and Oka et al teaches fluorine-modified trimethylsiloxysilicate treated powders. The motivation to incorporate the silicon resin polymethylsilsesquixane, fluorine-modified trimethylsiloxysilicate treated powders, in the cosmetic composition is because the references teach the polymethylsilsesquioxane, fluorine-modified silicone, in a cosmetic composition and more specifically, because (1)Yonekura et al. teaches that the polymethylsilsesquixane powders have “excellent effects of natural color and smoothness upon application” to the skin (column 1 lines 60-65), provide “a moisturized feeling,” and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10); (2) Hougham teaches that fluorination of polymers provides for a wide range of properties for example, low permeability to nonpolar liquids , improved permaselectivity, excellent wettability and

adhesion, low friction coefficient and chemical inertness; and (3) Wada et al. teaches the surface-hydrophobicized silica-coated metal oxide particle have (1) excellent properties such as suppression of photocatalytic activity (2) "an excellent feel during use," (3) "improvement in the particle fineness and dispersion properties," "(4) low phototoxicity" (5) excellent storage stability (6) satisfactory surface properties (moistness, smoothness) when added to cosmetics and (7) high contouring properties (column 1 lines 30-36, column 2 lines 40-45, 63-68, and column 9 lines 20-25). Therefore, a skilled artisan would have reasonable expectation of successfully producing a similar composition with "excellent effects of natural color and smoothness upon application" to the skin (column 1 lines 60-65), provide "a moisturized feeling," and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10); provides for a wide range of properties for example, low permeability to nonpolar liquids , improved permaselectivity, excellent wettability and adhesion, low friction coefficient and chemical inertness; and that has (1) excellent properties such as suppression of photocatalytic activity (2) "an excellent feel during use," (3) "improvement in the particle fineness and dispersion properties," "low phototoxicity" (4) excellent storage stability and (5) high contouring properties.

Claims 7 and 12 are product by process claims. It is well settled in patent law that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See MPEP § 2123. The court in In re Thorpe held, "even though product-by-process claims are limited by and defined by the process,

determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the method of making the composition as claimed does not render structural limitations to the claimed composition. Thus, the processes are not given patentable weight. In claim 7, the formulation of the water-repellent resin powder "in a form of being kneaded with an oil agent, finely crushed by a crusher, or dispersed in water" is not given patentable weight. Also, in claim 12 the formulation "in a mechanically ground form in advance or at the time of production of the cosmetic product" is not given weight.

Ichinohe et al. do not expressively teach the term "water-runability," as recited in claim 14. However, the reference teaches that the composition has a "strong repellency to sweat and water(abstract)." This is viewed equivalent or similar to the recited property of the cosmetic composition, as recited in claim 14. Also, the method of imparting water-runability on the skin or hair, as recited in claim 16, 18-20, is viewed obvious because the reference teaches the moisture resistant property and its use on the skin or hair ([0016]). In the examiners view, the "water-runability" property of the claimed cosmetic composition and its use are equivalent to that of the reference composition. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to use the cosmetic composition taught in the prior

art with the expectation of successfully producing a similar cosmetic composition with the resulting water-runability and usability properties.

Ichinohe et al. does not specifically teach the coated portion having "three or more of protruding portions having a height of 0.2 um or more per 10 um-length," as recited in claim 15. However, Ichinohe et al. teaches the composition as claimed and therefore the properties of such a claimed composition are viewed obvious. The cosmetic composition requires the same components and the physical properties of the cosmetic composition will therefore be identical. A physical property is inseparable from its composition and because prior art teaches the cosmetic composition, then the properties are also taught by the prior art (In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) See MPEP 2112.01).

Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented), Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer, 1999) and Wada et al. (US Pat No. 6,534,044– previously presented), as applied to claims 1, 3-7, 9-10, 12, 14-15, 16, and 18-20 as above and further in view of Fukuchi (English translation, JP 01211518 A).

Ichinohe et al. does not teach the use of a highly polymerized silicone but does teach the use of a one-end hydrogensiloxane (see page 6 right column text and structural formula) as a component in the cosmetic composition.

Fukuchi teaches the use of a polysilicone of the general Formula I in a hair cosmetic composition. Formula I comprises R1 representing a methyl group or phenyl group and R2 represents a methyl group or hydroxyl group (n represents integar of 3,000-20,000) (see page 1, right paragraph, structural formula I). The reference teaches that the ingredients provide "luster and silkiness onto the hair," "excellent conditioning effects," and sustains these effects over "relatively long periods" (see English translation page 2, bullet 3 lines 1-4).

Both Ichinohe et al. and Fukuchi teach compositions directed to hair compositions. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the composition of Ichinohe et al. by adding to the composition the polysilicone of Formula I in Fukuchi. The modification would have been motivated by the teaching in Fukuchi that the polysilicone of Formula I will provide a sustained luster, silkiness, and excellent conditioning effects on the hair. The skilled artisan would have had a reasonable expectation of successfully producing a stable and effective hair cosmetic composition with good moisture resistancy and conditioning effects, because both Ichinohe et al. and Fukuchi teach similar formulations (e.g., hair, creams, emulsions comprising volatile oils, etc.).

Also, the method of imparting water-runability on the skin or hair, as recited in claim 17, is viewed obvious because the reference teaches the moisture resistant property and its use on the skin or hair ([0016]). In the examiners view, the "water-runability" property of the claimed cosmetic composition and its use are equivalent to that of the reference composition. Therefore, it would have been obvious to one with

ordinary skill in the art at the time the invention was made to use the cosmetic composition taught in the prior art with the expectation of successfully producing a similar cosmetic composition with the resulting water-runability and usability properties.

Claims 11 and 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichinohe et al. WO 02/03928 (translation: US Publication no. 20030082218A1 – previously presented), Yonekura et al. (US Pat. No. 4,892,726– previously presented), Oka et al. (JP 2000-309505), Fluoropolymers (Gareth Hougham Published by Springer, 1999) and Wada et al. (US Pat No. 6,534,044– previously presented) as applied to claims 1, 3-7, 9-10, 12, 14-15, 16, and 18-20 as above, and further in view of Hayashi et al. (English translation, JP 2000327948A).

Ichinohe et al. does not teach the water-repellent surface treated pigment coated with silica, alumina, or zirconia, and also does not teach the water-repellent surface treated pigment further subjected to water repellent surface treatment.

However, Hayashi et al. does teach the use of a metal compound powder having a metal compound particle on the surface of the metallic oxide or hydroxide particle in a cosmetic composition (see English translation [0002]). Further, Hayashi et al. teaches the powder coated with organosilane (see page 4/55, heading [Problem to Be Solved], lines 1-13]). Also, the composition is taught to have “outstanding hydrophobic property” (see [0001]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Ichinohe composition by incorporating the water

repellent surface treated pigment component as motivated by Hayashi et al., because the latter teaches that the coated metal compounds have good hydrophobic properties and are used in cosmetics. Therefore, the skilled artisan would have had a reasonable expectation that the composition would yield a strong water repellency property.

Response to Arguments

Applicant's arguments filed July 1, 2009 have been fully considered and are not persuasive.

Applicant argues the Ishii Declaration presents comparative Examples summarized in Table 1 wherein components A to E in specific amounts provide advantageous effects. Firstly, the Examiner's contention is that the Declaration does not commensurate in scope because the amount comparison has not been made with respect to the prior art relied upon. Additionally, the Examiner states Comparative Ex. 2 is not proper because component A or dimethylpolysiloxane of the prior art is exemplified in the amount claimed. Comparative Ex. 4-5 and Comparitive Ex. C are not a proper side-by side comparison because the Ichinohe reference does not exemplify component C or the oil soluble silicone treated with a perfluoroalkyl group-containing polyalkylsiloxysilicate nor a water-repellent resin. The Comparative Ex. 3 is not persuasive because the Ichinohe et al. reference generally teaches the incorporation of polymethylsilsesquioxane as a component and fluorine-modified silicones, for example fluorine-contained unctuous agent which can also be mixed include perfluoropolyether, perfluoro-decaline, perfluorooctaine and the like in the cosmetic composition, and the use of pigments in the cosmetic compositions; and the (1)Yonekura et al. teaches that

the polymethylsilsesquixane powders have “excellent effects of natural color and smoothness upon application” to the skin (column 1 lines 60-65), provide “a moisturized feeling,” and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10); (2) Hougham teaches that fluorination of polymers provides for a wide range of properties for example, low permeability to nonpolar liquids , improved permaselectivity, excellent wettability and adhesion, low friction coefficient and chemical inertness. Comparative Ex. A and B are not persuasive because the Ichinohe et al. reference generally teaches the pigments used in 0.1-99% of the composition and Wada et al. specifically teaches cosmetic material comprising silica coated metal oxide particle further surface treated with a hydrophobizing agent. The metal oxide particles include titanium oxide, zinc oxide, cerium oxide, zirconium oxide, and iron oxide. The surface coated metal oxide particles have a primary particle size of 5-120 nm. The metal oxide particles coated with silica (column 3 lines 39-47) are further coated with a hydrophobizing agent (column 49, claim 1). The amount of the silica-coated metal oxide particles and surface-hydrophobicized silica-coated metal oxide particles in a cosmetic material of the invention is preferably in the range of 1-50 wt % and more preferably 5-30 wt % with respect to the cosmetic material. The reference teaches such surface-hydrophobicized silica-coated metal oxide particle have (1) excellent properties such as suppression of photocatalytic activity (2) “an excellent feel during use,” (3) “improvement in the particle fineness and dispersion properties,” “(4) low phototoxicity” (5) excellent storage stability (6) satisfactory surface properties (moistness, smoothness) when added to cosmetics and

(7) high contouring properties (column 1 lines 30-36, column 2 lines 40-45, 63-68, and column 9 lines 20-25).

With respect to the discussion on Component B, the Examiner states the argument that there is no reason that a person skilled in the art would take particular note of polymethylsilsesquixane in Ichinohe out of the various materials of component F of Ichinohe is not persuasive. The Examiner states the secondary reference Yonekura et al. provides motivation to use polymethylsilsesquixane. The motivation comes from the teaching of Yonekura et al. that the polymethylsilsesquixane powders have “excellent effects of natural color and smoothness upon application” to the skin (column 1 lines 60-65), provide “a moisturized feeling,” and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10). Moreover, the reference teaches the use of polymethylsilsesquixane in 3-5 parts as a component of makeup or cosmetic compositions.

With respect to the discussion on Component C, the Examiner states the argument that Oka's fluorine-modified trimethylsiloxysilicate treated powders are not oil-soluble resins is not persuasive. The Examiners contention is that the powders can encompass oil-soluble resins. Further, applicant argues Hougham does not recite "water-runability and its temperature dependency as properties.” The Examiner states the motivation to combine a reference need not be the same as Applicant. The prior art clearly teaches: (1)Oka et al teaches fluorine-modified trimethylsiloxysilicate treated powders. (2)Yonekura et al. teaches that the polymethylsilsesquixane powders have “excellent effects of natural color and smoothness upon application” to the skin (column

1 lines 60-65), provide “a moisturized feeling,” and more enhance the functions of pigment powders used as cosmetic components in combination therewith (column 2, lines 1-10); (3) Hougham teaches that fluorination of polymers provides for a wide range of properties for example, low permeability to nonpolar liquids , improved permaselectivity, excellent wettability and adhesion, low friction coefficient and chemical inertness.

With respect to the discussion on Component E, the Examiner is aware that the amount of pigment is not specifically taught in Example 11, however, the prior art teaches 0.1-99% of the composition. Examiner respectfully reiterates: Wada et al. specifically teaches cosmetic material comprising silica coated metal oxide particle further surface treated with a hydrophobizing agent. The metal oxide particles include titanium oxide, zinc oxide, cerium oxide, zirconium oxide, and iron oxide. The surface coated metal oxide particles have a primary particle size of 5-120 nm. The metal oxide particles coated with silica (column 3 lines 39-47) are further coated with a hydrophobizing agent (column 49, claim 1). The amount of the silica-coated metal oxide particles and surface-hydrophobicized silica-coated metal oxide particles in a cosmetic material of the invention is preferably in the range of 1-50 wt % and more preferably 5-30 wt % with respect to the cosmetic material. The reference teaches such surface-hydrophobicized silica-coated metal oxide particle have (1) excellent properties such as suppression of photocatalytic activity (2) “an excellent feel during use,” (3) “improvement in the particle fineness and dispersion properties,” “(4) low phototoxicity” (5) excellent storage stability (6) satisfactory surface properties (moistness,

smoothness) when added to cosmetics and (7) high contouring properties (column 1 lines 30-36, column 2 lines 40-45, 63-68, and column 9 lines 20-25).

With respect to the discussion on Component A/D, the Examiner states the prior art exemplifies component A in the claimed amount, and component D. The comparative Table does not compare a composition with the claimed amount of A and an amount of D not claimed. Examiner's contention is that the Table and Declaration do not commensurate in scope because the amount comparisons have not been made with respect to the prior art relied upon.

Lastly, the Examiner states the comprising language of the claimed invention does not exclude the mucopolysaccharide of the prior art.

The arguments are not persuasive and the rejection is made **FINAL**.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Soroush whose telephone number is (571)272-5008. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shengjun Wang/

Primary Examiner, Art Unit 1627